

Office Action Summary

Application No.

09/903,437

Examiner

Thanh X Luu

Applicant(s)

KIYOMOTO ET AL

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 14-16, 18-26, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-16, 18-26, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

15) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Attachments

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s): _____

- 4) ☐ Notice of Substantive Examination (PTO-900)
- 5) ☐ Notice of Informal Patent Application (PTO-901)
- 6) ☐ Other _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 14-16, 18-26, 31 and 32 in Paper No. 9 is acknowledged.

Claims 14-16, 18-26, 31 and 32 are currently pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the light path that is reflected back at least more than once with each of the resin boundary surface and the light reflecting member (of claims 16, 19-23 and 26) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Claims 24 and 25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from a multiple dependent

claim. Since the claims 24 and 25 have not been

5. Claims 14, 16, 19-23, 26, 31 are objected to because of the following informalities:

In claim 14, "it" lacks proper antecedent basis.

In claim 16, "the light deviated", "the external" lacks proper antecedent basis.

Further it is unclear what "external" refers to.

In claims 19-23 and 26, the claims are dependent from cancelled claim 17.

In claim 19, as dependent from claim 18, "said light emitter" lacks proper antecedent basis.

In claim 19, "each component" lacks proper antecedent basis.

In claim 20, as dependent from claim 16, "the optically active element" lacks proper antecedent basis.

In claim 20, as dependent from claim 18, "the optically active element" and "the element mounting position" lacks proper antecedent basis.

In claim 21, as dependent from claim 18, "the element mounting position" lacks proper antecedent basis.

In claim 22, "the optically active element" lacks proper antecedent basis.

In claim 23, "its front" lacks proper antecedent basis.

In claim 26, "the resin layer" lacks proper antecedent basis.

In claim 31, "the light receiver" and "the light emitted" lacks proper antecedent basis.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 16, 19-23 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear to one of ordinary skill in the art how to make and use an optical component mounting wherein a light path is reflected back at least more than once with each of the resin boundary surface and the light reflecting member.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Regarding claims 16, 19-24 and 26, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Whoever invents shall be entitled to a patent unless -

Art Unit: 2878

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 18-23 and 26, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Yamakawa (U.S. Patent 4,978,843).

Regarding claims 18-23 and 26, Yamakawa discloses (see Figures 1 and 4c) an optical component positioned on a front wall of a photodetector (4a), comprising: a light reflecting member (1c) for reflecting the light entering from an external direction, and a resin boundary surface (41a) for totally reflecting the light reflected by the light reflecting member to strike against the photodetector. Yamakawa further discloses (see Figures 1 and 4c) a recess (at 51) to at least dispose the photodetector. Yamakawa also discloses (see Figures 1 and 4c) an engagement portion (at 1a) or a positioning portion, and a major axial direction (along 4) and a minor axial direction (along position at 1).

12. Claims 16, 20, 22 and 23, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Daiku (U.S. Patent 5,914,760).

Regarding claims 16, 20, 22 and 23, Daiku discloses (see Figure 28) an optical component mounting a light active element (1) on an element mounting position, comprising: a resin boundary surface (top of 330) for almost totally reflecting a light deviated from a predetermined area in front of the element mounting position and a light reflecting member (331), in which the element mounting position, the resin boundary

surface reflects light path from the

Application/Control Number: 09/903,437
Art Unit: 2878

back at least more than once with each of the resin boundary surface and the light reflecting member. The element is inherently mounted (not shown) to an engagement or positioning portion since the device is in a display. Daiku also discloses (see Figure 28) a major (up/down) and a minor (left/right) axial direction.

13. Claims 14, 15 and 31, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Uematsu et al. (U.S. Patent 6,294,723).

Regarding claims 14, 15 and 31, Uematsu et al. disclose (see Figures 13a and 30b) a light receiver molding having a photodetector (5) within a resin (4), in which a light reflecting member (2) is disposed behind a boundary surface on a light receiving side of the resin so that the reflecting member reflects the light entering into a region deviated from a predetermined area in front of the photodetector to be totally reflected (at 1) by a resin boundary surface (at 1) to be received by the photodetector. Uematsu et al. also disclose (see Figure 13a) a part (3) of the light reflecting member comes into contact with an outer circumferential part of a resin layer composing the resin boundary surface. Uematsu et al. further disclose the photodetector is a photoelectric transducer or a photoreceiver and a light emitted by a light projecting element (sun) is detected by the light receiver.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

...not identically disclosed or described as set forth in the prior art.
invention was made to a person having ordinary skill in the art.
Patentability shall not be negated by the manner in which the invention was made.

15. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uematsu et al.

Regarding claim 32, Uematsu et al. disclose the claimed invention as set forth above. Uematsu et al. do not specifically disclose a battery charger as claimed. However, Uematsu et al. teach a photovoltaic device for collecting solar energy. It is notoriously well known in the art to couple a photovoltaic device with a battery charger in order to convert the solar energy into stored electrical energy. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a battery charger as claimed in the apparatus of Uematsu et al. to store electrical energy for future use.

16. Claims 19, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daiku

Regarding claims 19 and 21, Daiku discloses the claimed invention as set forth above. Daiku does not specifically disclose a recess as claimed. However, providing recesses in mounting surfaces and optical components are well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a recess as claimed in the apparatus of Daiku to provide a more compact configuration.

Regarding claim 26, Daiku discloses the claimed invention as set forth above. Daiku further discloses (see Figure 28) a part of the light reflecting member comes into circumferential part of the boundary surface. However, it has been held that a claim is

Application/Control Number: 09/903,437

Art Unit: 2878

in shape is a matter of choice in which a person of ordinary skill in the art would have found obvious. *In re Dailey*, 149 USPQ 47. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a circumferential part in the apparatus of Daiku to match a rounded display, as desired.

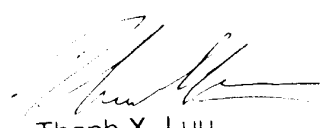
Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl
June 17, 2003



Thanh X. Luu
Patent Examiner